

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Alok M. Srivastava et al. : Group Art Unit:
Serial No.: : Examiner:
Filed: :
For Light Sources With Nanometer-Sized VUV :
Radiation-Absorbing Phosphors :

INFORMATION DISCLOSURE STATEMENT

- ☒ 1 **Pursuant to 37CFR 1.97(b)**
[within 3 months of national, non-CPA filing or prior to 1st Office Action] *no charge*
- ☐ 2 **Certification Pursuant to 37 CFR 1.97(c)(1)**
[before Final Office Action, Allowance, or other action closing prosecution] *no charge*
- ☐ 3 **Fee Payment Pursuant to 37 CFR 1.97(c)(2)**
[before Final Office Action, Allowance, or other action closing prosecution] *\$180.00*
- ☐ 4 **Certification & Fee Payment Pursuant to 37 CFR 1.97(d)**
[On or before issue fee payment] *\$180.00*

ATTN: BOX PATENT APPLICATION
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The following are submitted in the above application in compliance with 37 CFR 1.97 and 37 CFR 1.98:

- ☒ 5 A list of documents on form PTO-1449 or Substitute together with copies of each identified document and a translation thereof or a concise explanation of each non-English language document or a Search Report from an International Searching Authority for a patent application filed via the Patent Cooperation Treaty or document(s) cited in the application or the priority application.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on the date indicated below.

Date of Deposit

Type or Print Name

Signature

This paper is submitted in accordance with:

- ☒ 6 37 CFR 1.97(b): [within 3 months of national, non-CPA filing or prior to 1st Office Action]
- ☐ 7 37 CFR 1.97(c): [before Final Office Action, Allowance, or other action closing prosecution, whichever is earlier]; and
- ☐ 8 The required Certification made in item 11 below; or
- ☐ 9 The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 15 below.
- ☐ 10 37 CFR 1.97(d): [on or before issue fee payment]; and
- a) The required Certification is stated in item 11 below; and
- b) The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 14 below.
- ☒ 11 Certification
- ☐ 12 Each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of this Statement; or
- ☐ 13 No item contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this document after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in 37 CFR 1.56(c) more than three (3) months prior to the filing date of this Statement.
- ☒ 14 Payment of all applicable fees:
- ☒ 15 Please charge all applicable fees associated with the submittal of this Information Disclosure Statement to Deposit Account No. 07-0868

An original and two (2) copies of this document are enclosed.

September 25, 2003
Date

General Electric Company
CRD Patent Dock t Rm 4A59
P.O. Box 8, Bldg. K-1
Schenectady, New York 12301
Customer Number: 006147

Respectfully submitted,

Toan P. Vo

Attorney - Toan P. Vo
Registration No. 43,225
Phone: (518) 387-6648
or (518) 387-7122

FORM PTO-1449
(REV. 7-80)
(Title Amended 3/83)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

SERIAL NO.

136299

Applicant

Alok M. Srivastava et al.

Filing Date

Group

INFORMATION DISCLOSURE STATEMENT BY APPLICANT--

LIST OF ITEMS

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA 4 2 6 2 2 3 1	04/14/81	Anderson et al.			
	AB 5 6 2 4 6 0 2	04/29/97	Lenox et al.			
	AC 5 9 5 2 7 9 1	09/14/99	Watanabe et al.			
	AD 5 9 5 8 3 6 1	09/28/99	Laine et al.			
	AE 5 9 5 9 4 0 5	09/28/99	Soules et al.			
	AF 6 0 5 1 9 2 2	04/18/00	Schlejen et al.			
	AG 6 1 3 7 2 3 6	10/24/00	Michiels et al.			
	AH					
	AI					
	AJ					
	AK					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	No
	AL 0 9 9 3 0 2 0	09/22/99	EPO				
	AM 0 2 2 0 6 9 6	09/07/01	PCT				
	AN 0 2 2 0 6 9 5	09/08/01	PCT				
	AO						
	AP						

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

AR	US 2003/0011310A1 Patent Application Publication, Juestel et al. -Published Jan. 16, 2003
AS	US 2002/0185960A1 Patent Application Publication, Setlur et al. - Published Dec. 12, 2002
AT	US 2002/0171356A1 Patent Application Publication, Setlur et al. - Published Nov. 21, 2002
EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to applicant.

FORM PTO-1449
(REV. 7-80)
(Title Amended 3/83)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

SERIAL NO.

136299
Applicant

Alok M. Srivastava et al.

Filing Date

Group

INFORMATION DISCLOSURE STATEMENT BY APPLICANT--
LIST OF ITEMS

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	BA					
	BB					
	BC					
	BD					
	BE					
	BF					
	BG					
	BH					
	BI					
	BJ					
	BK					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	No
	BL						
	BM						
	BN						
	BO						
	BP						

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

BR	US 2003/0032192A1 Patent Application Publication - Haubold et al. - Published Feb. 13, 2001
BS	R. Baranwal et al., "Flame Spray Pyrolysis of Precursors as a Route to Nano-Mullite Powder: Powder Characterization and Sintering Behavior", J. Am. Ceram. Soc., Vol. 84, 951-961 (2001)
BT	W. Que et al., "Preparation and Characterization of Erbium Oxalate and Erbium Oxide Nanoparticles by Microemulsion Technique", Mat. Sci. & Eng. C, Vol. 16, 51-54 (2001)

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(REV. 7-80)
(Title Amended 3/83)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

136299

SERIAL NO.

Applicant

Alok M. Srivastava et al.

Filing Date

Group

INFORMATION DISCLOSURE STATEMENT BY APPLICANT--

LIST OF ITEMS

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	CA					
	CB					
	CC					
	CD					
	CE					
	CF					
	CG					
	CH					
	CI					
	CJ					
	CK					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	No
	CL						
	CM						
	CN						
	CO						
	CP						

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

✓	CR	R. Subramaman et al., "Synthesis of Nanocrystalline Yttria by Sol-Gel Method", Mat. Lett., Vol. 48, 342-346 (2001)
✓	CS	R. Ramesh et al., "Optical Properties of Ce ³⁺ in Self-Assembled Strontium Chloro(hydroxy) Apatite Nanocrystals", J. Phys. Chem. B, Vol. 104, 8351-8360 (2000)
✓	CT	T.S. Ahmadi et al., "Low Temperature Synthesis of Pure and Mn-Doped Willemite Phosphor (Zn ₂ SiO ₄ :mn) in Aqueous Medium", Mat. Res. Bull., Vol. 35, 1869-1879 (2000)

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(REV. 7-80)
(Title Amended 3/83)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

136299

SERIAL NO.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT--
LIST OF ITEMS

(Use several sheets if necessary)

Applicant

Alok Srivastava et al

Filing Date

Group

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	DA					
	DB					
	DC					
	DD					
	DE					
	DF					
	DG					
	DH					
	DI					
	DJ					
	DK					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	No
	DL						
	DM						
	DN						
	DO						
	DP						

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

DR	"Novel Nanophosphors for High-Efficiency Fluorescent Lamps", Technical Proposal submitted to US DOE. April 14, 2003
DS	K. Riwotzki et al., "Liquid Phase Synthesis of Colloids and Redispersible Powders of Strongly Luminescing LAPO4: Ce, Tb Nanocrystals, Angew. Chem. Int. Ed., Vol. 40, No. 3, 573 (2001)
DT	M. Kottaisainy et al. "Yttrium Oxide: Eu ³⁺ Red Phosphor by Self-Propagating High Temperature Synthesis, Mat. Res. Bull., Vol. 31, No. 8, 1013 (1996)

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(REV. 7-80)
(Title Amended 3/83)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

136299

SERIAL NO.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT--
LIST OF ITEMS

(Use several sheets if necessary)

Applicant

Alok Srivastava et al

Filing Date

Group

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	EA					
	EB					
	EC					
	ED					
	EE					
	EF					
	EG					
	EH					
	EI					
	EJ					
	EK					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	No
	EL						
	EM						
	EN						
	EO						
	EP						

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

/	ER	H. Tsuboi et al., "Synthesis and Fluorescence Properties of Eu ²⁺ - Complex-Doped - SiO ₂ Gels", J. Am. Ceram. Soc., Vol. 81, No. 5, 1197 (1998) -
/	ES	C. Feldman et al., "Preparation of Sub-Micrometer LnPO ₄ Particles (Ln=La,Ce)", J. Mat. Sci., Vol. 37, 3251 (2002)
/	ET	S. Nichihama et al., "The Preparation of Rare Earth Phosphate Fine Particles in an Emulsion Liquid Membrane System", J. Mater. Chem., Vol. 12, 1053 (2002)

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449
(REV. 7-80)
(Title Amended 3/83)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

SERIAL NO.

136299

Applicant

Alok Srivastava et al

Filing Date

Group

INFORMATION DISCLOSURE STATEMENT BY APPLICANT--
LIST OF ITEMS

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	FA					
	FB					
	FC					
	FD					
	FE					
	FF					
	FG					
	FH					
	FI					
	FJ					
	FK					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	No
	FL						
	FM						
	FN						
	FO						
	FP						

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

FR	I.W. Lenggoro et al., "Synthesis of LaPO ₄ : Ce,Tb Phosphor Particles by Spray Pyrolysis", Mat. Lett., Vol. 50, 92 (2001)
FS	
FT	

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to applicant.